



# Wetland Conservation Act

## – Basic Administration

### Part 4





# Actions Eligible for Wetland Credit





# Upland Buffer Areas

- Up to 10% credit for nonnative vegetation.
- Up to 25% credit for native vegetation.
- The area of buffer for which credit is granted must not exceed the area of the replacement wetland.
- Establishment of buffer around existing wetland adjacent to the replacement wetland is eligible for credit when the minimum required widths are maintained and the maximum buffer area is not exceeded.





# Example Buffer Credit



Buffer Area = 2  
acres x 25%

= 0.5 acres of  
credit

(For native, non  
invasive  
vegetation)





# Increased Credit for Buffer

- For buffer areas of native, noninvasive vegetation, the LGU may increase the amount of credit to a maximum of 50% if the TEP finds that additional buffer will improve replacement wetland sustainability and provide significant functional benefits.

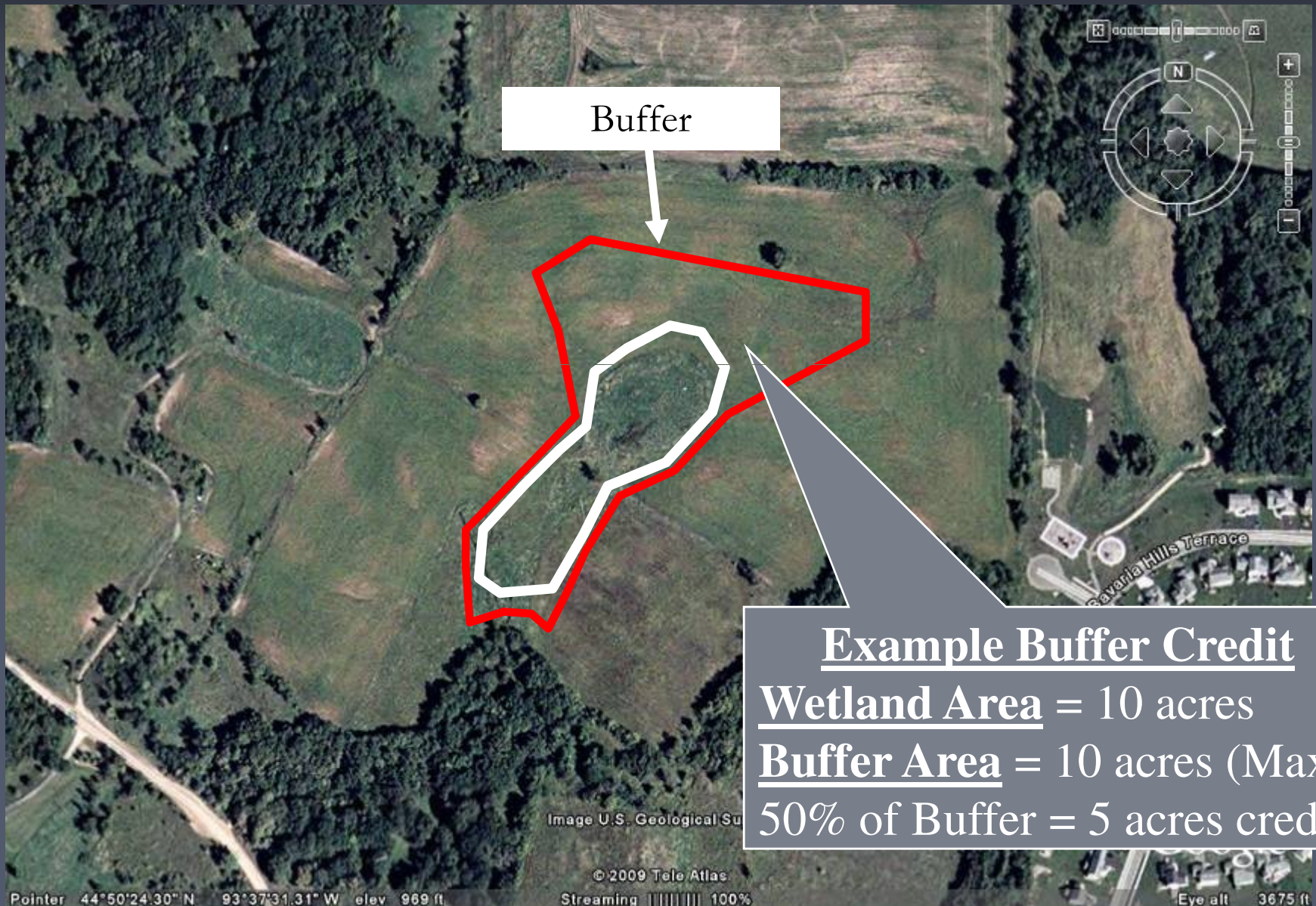


# Increased Credit for Buffer

- Buffers add to replacement wetland sustainability and provide significant functional benefits when they:
  - (1) extend upstream in the watershed, provide slope and soil stability, and otherwise protect and improve water quality;
  - (2) protect valuable native plant communities or habitats that could otherwise be lost or degraded;
  - (3) provide important habitat connections; or
  - (4) otherwise substantially improve important wetland functions based on a functional assessment and consideration of current and future adjacent land use.



## Example from previous slide: buffer extended to improve water quality in an impaired watershed







# Restoration of Completely Drained Wetland Areas



- Best option for credit, usually 100% credit



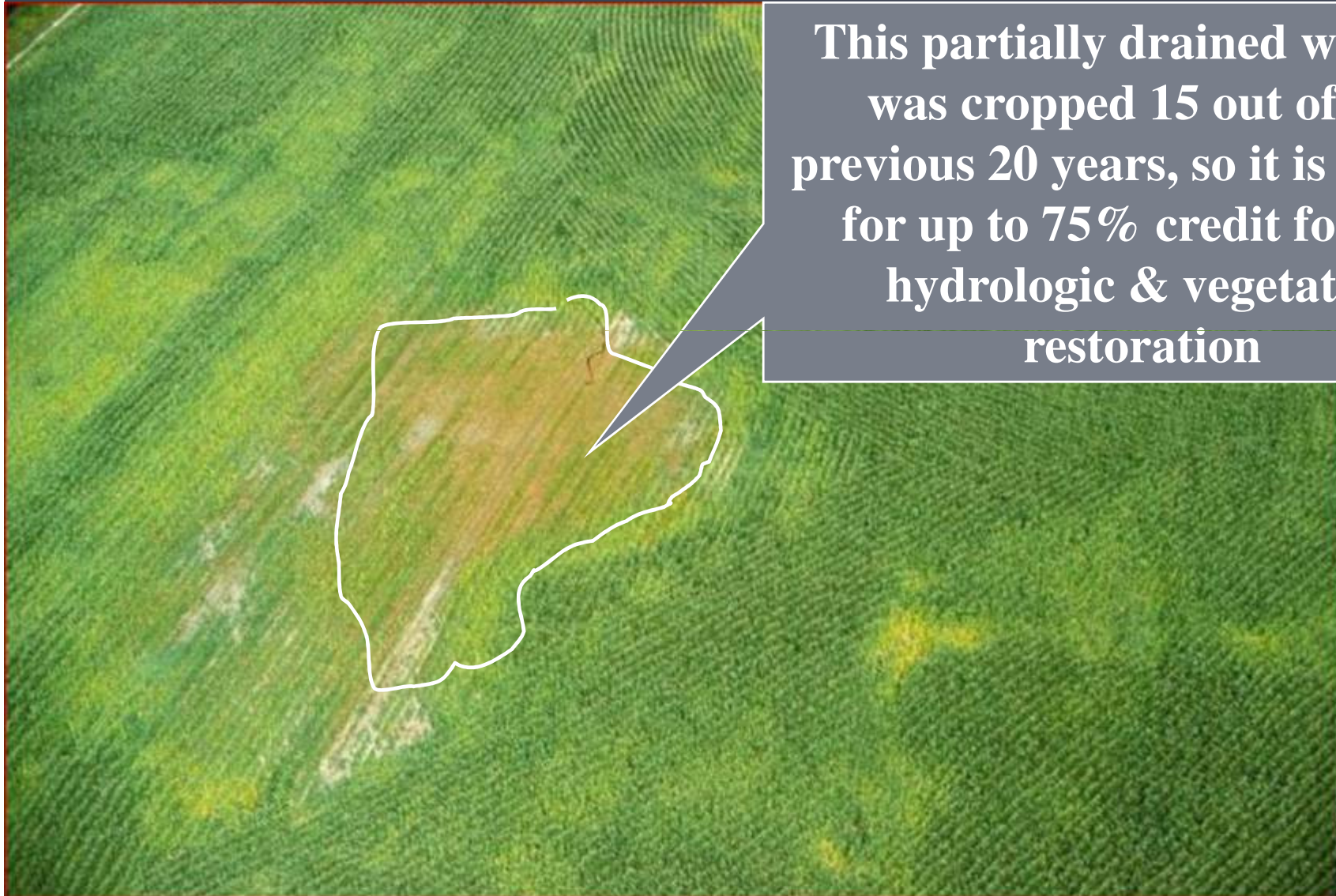
# Restoration of partially drained or filled wetland areas

- A. any wetland area substantially degraded by partial drainage or fill that was planted with annually seeded crops... in at least 10 of the last 20 years before the date of application is eligible for replacement credit in a percentage equivalent to the percent of time the wetland area was annually seeded...; and
- B. all other wetland areas substantially degraded by partial drainage or fill are eligible for replacement credit of up to 50% of the wetland area restored.





# Restoration of partially drained or filled wetland areas (cont'd)



This partially drained wetland was cropped 15 out of the previous 20 years, so it is eligible for up to 75% credit for full hydrologic & vegetative restoration





# Vegetative restoration of farmed wetlands

- Reestablishment of permanent native, noninvasive vegetative cover on farmed wetland areas that have not been affected by prior drainage or filling is eligible for replacement credit for:
  - A. up to 50% of the area restored for wetland areas that were planted with annually seeded crops, **were in a crop rotation seeded to pasture grasses or legumes, or were required to be set aside to receive price supports or equivalent payments in at least 10 of the last 20 years...**; or
  - B. up to 90% of the area restored for wetland areas in BSAs 2, 3, and 4 **in a percentage equivalent to the percent of time the wetland areas were planted with annually seeded crops... during the 20-year period prior...**



# Protection of wetlands previously restored via conservation easements

- Permanently protecting wetlands previously restored or created for conservation purposes under a contract or easement... where the area receiving credit meets the replacement wetland construction standards...
- The maximum replacement credit is 75% of the area created or restored under the conservation contract or easement.
- “Alternatively, credit may be allocated according to the other subparts in this part as applied prior to initiation of the contract or easement, when the applicant can document eligible credit yield to the satisfaction of the LGU.”



# Wetland creations

- Wetland creations;
  - Wetlands established via mineral extraction site reclamation; and
  - Water quality treatment areas.
- 
- “A wetland created in an upland area is eligible for replacement credit in an amount up to 75% of the total wetland area created.”





## Wetland creations (Cont'd)

- A wetland created as part of a water quality treatment system is eligible for replacement credit under this subpart only if the wetland area receiving credit is a functioning wetland designed for a maximum 24-inch rise in water level for the ten-year critical storm event and treatment of runoff is provided before discharge into the replacement wetland area according to part 8420.0528, subpart 2, item G.
- Such replacement wetlands are subject to monitoring requirements and are not eligible for exemptions if impacted.



# Restoration and protection of exceptional natural resource value

- “Restoration and protection of calcareous fens, white cedar swamps, floodplain or riparian wetlands and upland buffers, habitat corridors with other important resources, wetlands adjacent to designated trout waters, or other actions that restore and protect wetlands and adjacent areas are eligible for replacement credit when the action improves or directly contributes to the function and sustainability of an exceptional natural resource.”
- While wetlands are typically involved in some way, the goal is to improve the exceptional resource which may or may not be a wetland.



# Preservation of wetlands owned by the state or a local unit of government

- Available only in >80% areas.
- Up to 12.5% credit.
- Must be owned by the state or a local unit of gov't.
- Credit can only be granted after considering other actions eligible for credit.
- The wetland must be protected by a permanent conservation easement in a format prescribed by BWSR and granted to and accepted by BWSR after approval of the application.





# REPLACEMENT WETLAND CONSTRUCTION STANDARDS



# REPLACEMENT WETLAND CONSTRUCTION STANDARDS

- This part is split into the following three subparts:
  - Subp. 1. General requirement
  - Subp. 2. Design requirements
  - Subp. 3. Design considerations
- Design requirements must be met for all replacement wetlands (with flexibility when the LGU & TEP determine a standard is not appropriate).
- Design considerations must be considered and incorporated to the extent practicable and feasible, **but they may not be appropriate in every situation.**



# General Requirement

- In evaluating a proposed replacement or banking plan application, the LGU must determine that the plan will adequately replace the public value of wetlands lost. If the LGU determines that the proposed replacement is not likely to result in adequate replacement of function and public value, the LGU must either require modifications necessary to obtain adequate replacement or deny the application.
- This is the overarching requirement for all WCA replacement actions!



# Design Requirements

- D. “Native, non-invasive vegetation must be established...”
- F. “The edge of created or graded wetlands must be comparable to other naturally occurring wetlands... Sideslopes of created wetlands, graded portions of restored wetlands, and graded buffer strips, must not be steeper than 8:1...”
- G. “Treatment of runoff before discharge to replacement wetland is required...”





# “Treatment of Runoff”

- “Treatment of runoff” under this part means:
  - any part of a stormwater treatment system needed to comply with water quality treatment requirements of state or local stormwater permits or ordinances, provided the treatment system is physically separated from the replacement wetland; or
  - when water quality treatment is not required by state or local permits or ordinances, the installation of appropriate best management practices, to the extent practicable and feasible, to protect long-term wetland function.



# Design Considerations

- Restored wetlands should emulate the hydrology and vegetation of presettlement wetland condition.
- Expanded buffers should be incorporated where there is a high potential for erosion or when necessary to provide habitat corridor connections.
- Measures should be taken to limit hydraulic bounce.
- Organic substrate must be sufficient to establish a functioning wetland, but **DON'T INTRODUCE INVASIVES!!!**



# INSPECTION AND MONITORING OF REPLACEMENT WETLANDS







# REPLACEMENT WETLAND CONSTRUCTION CERTIFICATION

- The LGU must certify the initial construction of replacement wetlands before replacement wetland monitoring begins.
- The LGU may require a preconstruction meeting before replacement wetland construction begins and may inspect the replacement wetland at any time during construction.



## Subp. 2

# Construction As-Built Documentation

- “Upon completion of initial construction or restoration activities, the landowner must provide the LGU with as-built information that documents compliance with the approved replacement plan.”
- The rule specifies what information needs to be provided



# Construction inspection and certification

- 1) Upon receipt of as-built documentation from the landowner, the LGU must inspect the replacement wetland to determine whether the as-built conditions comply with the construction specifications...
- 2) If the LGU determines that the construction is not in compliance with the approved plan, it must promptly notify the landowner of the deficiencies and actions required to gain compliance.
- 3) When the LGU certifies that the construction specifications have been met, the LGU must notify the applicant and TEP.



## Subp. 3. Duration of monitoring

- Monitoring may, at the discretion of the LGU, begin upon construction certification, but must begin no later than the first full growing season following construction certification.
- Monitoring must continue for five full growing seasons or until the LGU determines, with the concurrence of the TEP, that the replacement is successful, but in no case may the determination be made before the end of the third full growing season.





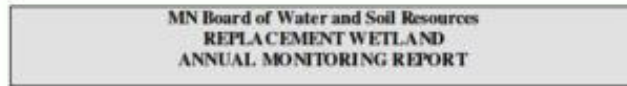
# Monitoring Requirements

- For project-specific replacement plans, if the LGU determines that, at any time during the monitoring period and based on the recommendation of the TEP, the goals of the approved replacement plan have not been achieved, and will not be achieved with more time, *the LGU must pursue one or more corrective actions*



# Monitoring reports.

- “...the applicant must submit annual monitoring reports...”
- The applicant must submit the annual report to the appropriate LGU (and banking administrator for banks) on a date determined by the LGU, but no later than Dec. 31.
- The LGU must ensure that copies of the monitoring report are distributed to the TEP.



### PROJECT INFORMATION

Landowner Name:

### PROJECT INFORMATION

Landowner Name:

Site ID #:

Applicant (if different from landowner):

Account #:	
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Project Name:

Bank Area (acres):

US ACE #:

County:

**Legal Description:**

Township

Sort

**DL-0**

Report prepared by:

Date:	
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## PROJECT OVERVIEW

Replacement wetland goals in terms of size, replacement credit amount, wetland types, hydrology, and wetland functions.

### MANAGEMENT HISTORY

*Dates restoration activities commenced and/or were completed. Include amendments to the plan.*

[illegible]

## METHODS

What was monitored (example: vegetation, hydrology), when and how.

## RESULTS

Summary of observations of vegetation (plant communities, dominant species) and hydrology measurements. Report condition of water control structures.

*Dates restoration activities commenced and/or were completed. Include amendments to the plan.*

[illegible]



# 8420.0820 LGU MONITORING RESPONSIBILITIES.

- If the landowner fails to submit the annual report associated with a project-specific replacement plan, the LGU must either pursue enforcement actions or prepare the annual report for the applicant. (Potential enforcement actions are listed in Subp. 1B)
- LGU may charge fees for preparing the report or use any financial assurance provided.

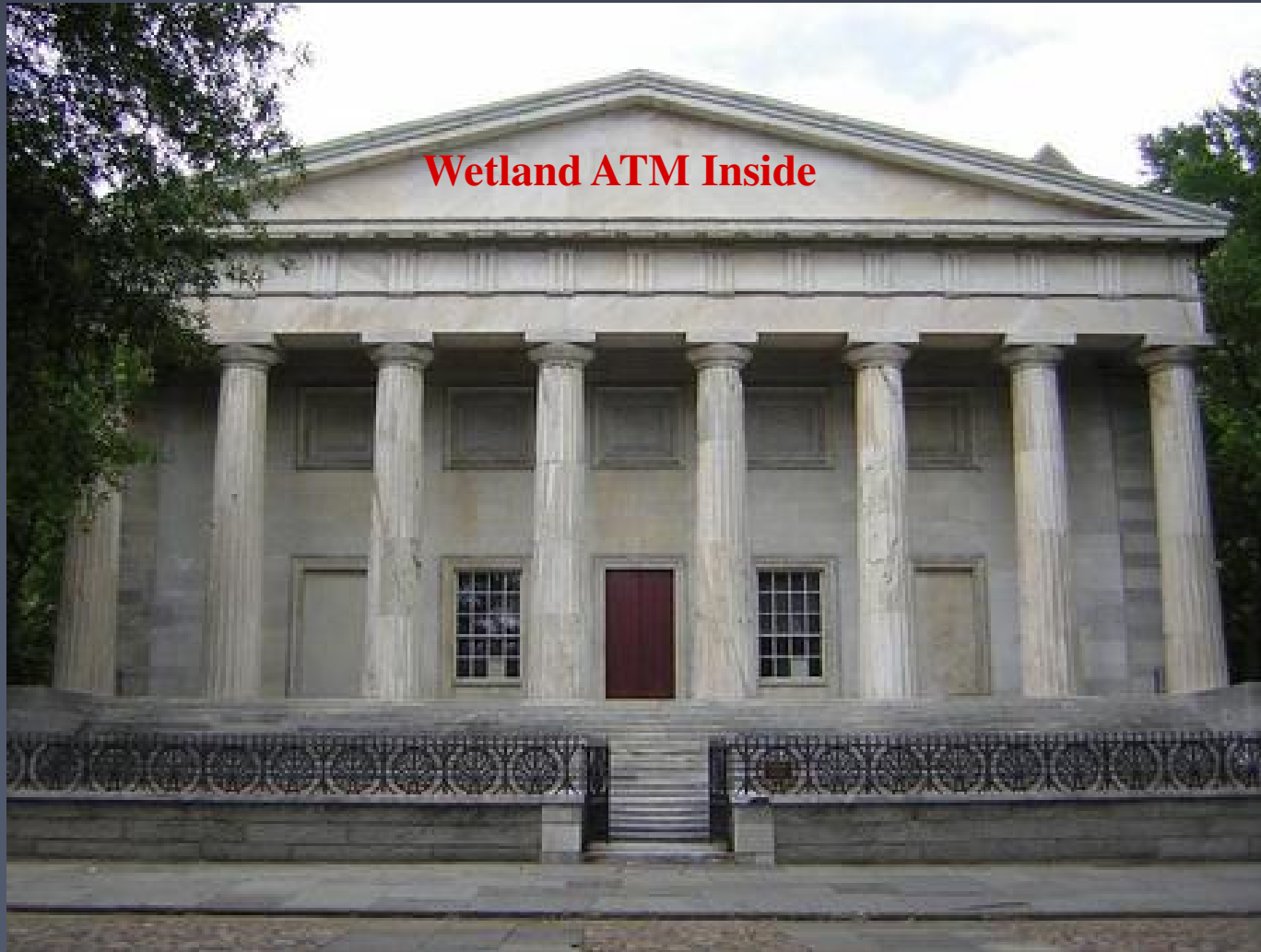




# LGU MONITORING RESPONSIBILITIES (Cont'd)

- The LGU must provide written notification to the applicant when the replacement has been certified as successful and the monitoring requirements have been fulfilled.
- is a rule requirement and required reporting item!
- If the reported numbers of replacement plans vs. certified sites don't match up, that's a red flag that WCA is not being properly implemented.

# What is Different if Replacement via Banking?





# Not Needed if Replacement via Banking

## ~~Review of Proposed Replacement~~

- ~~■ Actions eligible for credit~~
- ~~■ Replacement siting~~
- ~~■ Replacement timing~~
- ~~■ In-kind or out-of-kind~~
- ~~■ Replacement wetland design standards~~
- ~~■ Monitoring Plan~~
- Veg. Mgmt. Plan



**No sale, withdrawal, transfer, or use of wetland credits is valid until BWSR debits a wetland bank account.**

to an  
appropriate  
resource impacts

Date

The following authorized representatives of the regulatory authority (ies) identified on page 1 of this application hereby certify that they have: a) verified that the subject wetland credits are deposited in the account of the owner / seller, b) approved a wetland replacement plan or other water resource impact under their jurisdiction, and c) approved the proposed use of the wetland bank credits described herein.

Date

Date

Date

by certify that:

#### 9. BWSR APPROVAL AND DEBITING OF ACCOUNT

I hereby certify that the credits have been properly debited from the subject account, effective the date of signature.

Authorized Signature

Date

Upon approval by the BWSR, a copy of this instrument will be mailed to the user of the credits, all regulatory authorities involved, the account holder and the Board Conservationist. A letter will also be sent to the account holder acknowledging the debit and new account balance.

- 4) the subject wetland credits should be withdrawn my account, and  
5) I will not have a negative balance of credits after the subject credits are debited from my account.

Authorized Signature of Owner / Seller of Credits

Date

#### 9. BWSR APPROVAL AND DEBITING OF ACCOUNT

I hereby certify that the credits have been properly debited from the subject account, effective the date of signature.

Authorized Signature

Date

Upon approval by the BWSR, a copy of this instrument will be mailed to the user of the credits, all regulatory authorities involved, the account holder and the Board Conservationist. A letter will also be sent to the account holder acknowledging the debit and new account balance.

#### IMPORTANT REMINDERS

1. The Owner / Seller of the credits is responsible for submittal of this form, containing original signatures, to the BWSR Wetland Bank Administrator so the affected account can be properly debited.
2. No impacts to any wetland or other water resource may commence until the credits have been debited from the Minnesota Wetland Mitigation Bank and a copy of this approval has been mailed to the regulatory authority(ies), the account holder and the user of the credits.
3. It is a criminal offense for a seller of wetland credits to sell credits more than one time. It is the responsibility of the account holder to report any credit sales that are not noted on the most current official BWSR account balance.





# Wetland Banking



After



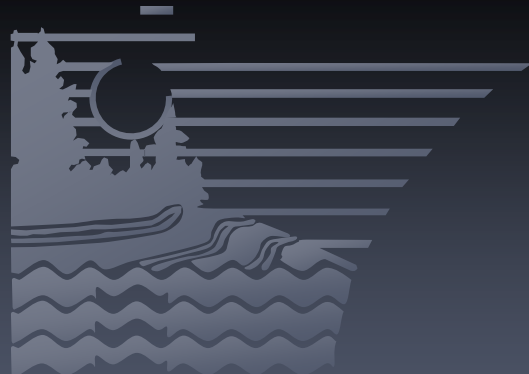
# Wetland Banking

- A system for which wetland replacement credits can be generated and “banked” for future use.
- BWSR is the administrator of the banking system.
- Applicants apply to the LGU for creating a bank and depositing credits.



# Wetland Banking

- Like replacement plans, LGU is the decision-maker for wetland banks.
- Unlike replacement plans, BWSR may refuse to deposit bank credits if they do not meet requirements. *Thus it is essential that the LGU coordinate with the TEP and obtain a recommendation.*



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# ESTABLISHING A WETLAND BANK SITE





# Application Procedures

- Same as replacement plan except the banking plan must also contain specific performance standards and a proposed credit release schedule based upon achievement of those standards.
- The TEP must review the banking plan application and may recommend changes or additions to the performance standards and credit allocation schedule.



# Example of Credit Release Schedule

**Table #5 – Proposed Credit Release Schedule (Credits)**

\*(numbers in the table represent the amount of credit proposed for release dependant on the aerial coverage of invasive species)

<b>Plant Zone and Action Eligible for Credit</b>	<b>Acres</b>	<b>R1 -15 % Credit 11/2010</b>	<b>R2 -30 % Credit 11/2011</b>	<b>R3-25 % Credit 11/2012</b>	<b>R4-30 % Credit 11/2013</b>
% Invasive Species		(40%)	(30%)	(20%)	(10%)
MW 2 – Sub. #3	24.00	9.60	7.20	4.80	2.40
% Invasive Species		(40%)	(30%)	(20%)	(10%)
MW 2 – Sub. #2	1.55	0.62	0.46	0.31	0.16
% Invasive Species		(40%)	(30%)	(20%)	(10%)
NS	8.63	3.45	2.58	1.74	0.86
% Invasive Species		(40%)	(30%)	(20%)	(10%)
UPL – Sub. #6	2.82	1.12	0.84	0.56	0.282



# Performance Standards Example

## Hydrology:

- **Fresh (Wet) Meadows, Sedge Meadows, Shrub-Carrs (Peat/Muck Soils):** *Hydrology shall consist of a water table at or within 12 inches of the surface throughout the growing season, except in drought years. Inundation shall not occur (unless there are site-specific conditions). An exception can be made for sites with hummocky microtopography -- hollows between hummocks can have standing water depths of up to 6 inches for extended duration. (USACE regional guidance)*



# Performance Standards Example

## Upland Buffer:

The plant community in the buffer area will be subject to the following success criteria:

- *Year -1: A minimum of 5 seeded species shall have germinated. One seeded species shall be dominant and no perennial invasive specie shall be dominant by the end of Year – 1.*
- *Year – 2: The plant community shall include 8 or more perennial species of native grasses and forbs with 2 seeded perennial species dominating by the end of Year-2.*
- *Year – 3: The plant community shall include 15 or more species of native grasses and forbs and achieve approximately 80 percent or greater canopy coverage by the end of Year-3.*
- *Year – 5: The plant community shall include 15 or more species of native grasses and forbs and achieve approximately 90 percent or greater canopy coverage by the end of Year -5.*



## Combined banking and project-specific replacement.

- When a banking plan applicant wishes to use a portion of the credits generated from a banking project for project-specific replacement, the banking plan must identify the project-specific impact and the amount of credits to be used according to a corresponding replacement plan.
- The credits must meet the [wetland replacement requirements] and the approved replacement plan, and be deducted before deposit of any credits into the state wetland bank.





# CERTIFICATION AND DEPOSIT OF CREDITS.

- Certification of credits by the LGU is requested by the banking plan applicant and may occur at any time during the monitoring period. The certification must be based on the findings and recommendation of the TEP...
- After the initial deposit, the remaining credits proposed for banking are eligible for deposit in accordance with the credit release schedule and performance standards included in the approved banking plan, subject to review by the TEP and certification by the LGU.
- If the approved specifications are not being met, full credit will not be allocated.



# WITHDRAWALS AND TRANSFERS

- **Reporting credit transactions.** Upon the sale, use, or transfer of credits, the owner of the account must immediately report the transaction to the board's banking administrator **on withdrawal or transfer forms provided by the board and include a copy of the bill of sale when applicable.**
- The board shall complete the accounting transactions and send a notice of credit withdrawal to the LGU, the account holder, and the applicant.

# Appeals





# Appeals Overview

**Two main categories of appeals:**

1. Appeals of LGU decisions.
2. Appeals of replacement and restoration orders.



# Appeals of LGU decisions

## LGU decisions that may be appealed:

- Replacement plan;
- Banking plans;
- Public road project notice;
- Exemption;
- No-loss; and
- Wetland boundary or type requests.





# Local Appeals

- For decisions made by staff, the local government unit must establish a local appeal process that includes a public hearing before appointed or elected officials.
- The decision of staff becomes final if not appealed to the local government unit within 30 days after the date on which the decision is mailed.



# Local Appeals

- For decisions made by staff, the notice of decision must state local appeal process information and the time period of 30 days to file an appeal.
- For all WCA decisions, the LGU may want to consider placing a condition on the approval in case of an appeal.



# Appeals to BWSR

An appeal of an LGU decision must be made to the BWSR within 30 calendar days of mailing the notice of decision.





# Appeals to BWSR

Appeals may be made by:

- The landowner;
- Those required to receive notice of decision;
- 100 residents of the county where the impact is.



# ENFORCEMENT







# Initial Case Report (ICR)

- Officers responding to potential violations that are not in progress and not likely to continue will complete an ICR and forward it to the LGU and members of the TEP.
- This only applies to “old” work that has been completed and is not likely to resume.



# Initial Complaint Reports (Cont'd)

- Communication is important!
- For an LGU, the first step is be to determine whether the project has received prior approval or qualifies for an exemption. Inform the landowner of the potential violation and give them the opportunity to provide information and/or apply for approval.
- Once the status of the project has been determined, the LGU, WREO, and TEP to close the case or indicate what the next action will be.



# Restoration orders.

- Promptly upon being informed... of the need, a SWCD staff person must inspect the site and prepare a plan in consultation with the LGU and the enforcement authority for restoring the site to its prealtered condition.
- The SWCD may request assistance from the LGU or TEP in inspecting the site and preparing the plan.
- Restoration must be ordered unless the TEP concludes that restoration is not possible or prudent.



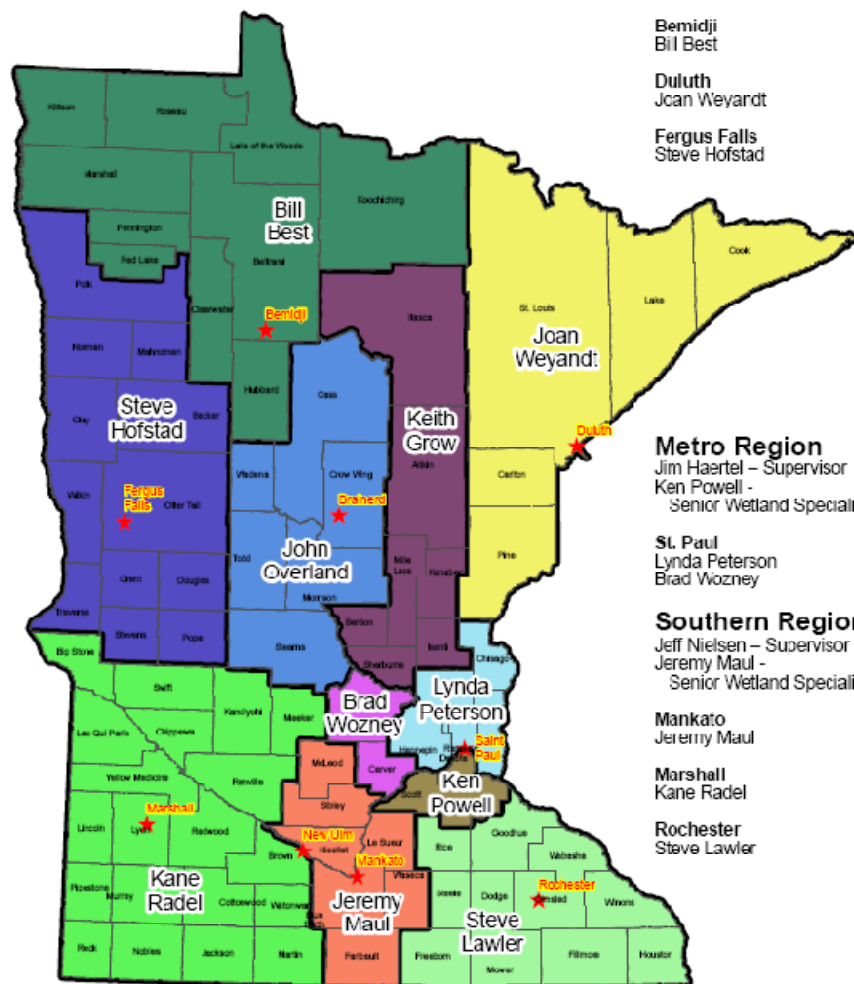
# ENFORCEMENT PROCEDURES (Cont'd)

- SWCD responsible for certifying that replacement order has been satisfied. Can utilize TEP for assistance.
- A certificate of satisfactory restoration or replacement may be issued with conditions **that must be met in the future, such as for issues with wetland vegetation, weed control, inspections, monitoring, or hydrology.**
- Failure to fully comply with any conditions that have been specified may result in the issuance of a new restoration or replacement order.



Need Help?

## Wetland Conservation Act Work Areas



### Northern Region

Ron Sheltro - Supervisor (218) 828 - 2604  
Dale Krystosek - (218) 333 - 8029  
Senior Wetland Specialist:

Brainerd (218) 828 - 2383  
Keith Grow (218) 828 - 6035  
John Overland (218) 825 - 6807

Bemidji (218) 755 - 4235  
Bill Best (218) 333 - 8026

Duluth (218) 723 - 4752  
Joan Weyandt (218) 723 - 4607

Fergus Falls (218) 736 - 5445  
Steve Hofstad

### Metro Region

Jim Haertel - Supervisor (651) 291 - 2906  
Ken Powell - (651) 296 - 0674  
Senior Wetland Specialist:

St. Paul (651) 296 - 3767  
Lynda Peterson (612) 201 - 9806  
Brad Wozney (651) 296 - 6060

### Southern Region

Jeff Nielsen - Supervisor (507) 359 - 6075  
Jeremy Maul - (507) 389 - 1967  
Senior Wetland Specialist:

Mankato (507) 389 - 1907  
Jeremy Maul

Marshall (507) 537 - 6060  
Kane Radel (507) 537 - 7069

Rochester (507) 206 - 2889  
Steve Lawler (507) 206 - 2990

[http://www.bwsr.state.mn.us/aboutbwsr/workareas/WCA\\_areas.pdf](http://www.bwsr.state.mn.us/aboutbwsr/workareas/WCA_areas.pdf)

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December 2008



Board of Water and Soil Resources-Wetlands - Windows Internet Explorer

http://www.bwsr.state.mn.us/wetlands/index.html

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## Wetlands

Wetland Regulation	Wetland Banking	Wetland Delineation	Wetland Restoration	Training
<a href="#">General permitting information</a> <a href="#">Wetland Conservation Act (WCA) rules (Chapter 8420)</a> <a href="#">2008-2009 WCA rulemaking</a> <a href="#">WCA Local Government Unit directory</a> <a href="#">BWSR WCA contacts</a> <a href="#">DNR Wetland Enforcement Officers</a> <a href="#">WCA forms</a> <a href="#">WCA regulatory guidance</a> <a href="#">BWSR Administrative Penalty Order Plan (June 12, 2008)</a> <a href="#">Northeast Wetland Mitigation Inventory and Assessment</a>	<a href="#">Available wetland bank credits (updated November 2008)</a> <a href="#">Wetland banking forms</a> <a href="#">Wetland banking fee policy (September 2007)</a> <a href="#">Wetland bank service area map</a> <a href="#">Sale of Credits to Public Road Authorities (Aug. 27, 2008)</a> <a href="#">Fact sheet</a> <a href="#">Road Mitigation Application Listing (Certified - Updated October 20, 2008; Note: 214-page document)</a> <a href="#">Road Mitigation Application Listing (Pending - Updated October 20, 2008; Note: 73-page document)</a> <a href="#">Local Road Wetland Banking Map (surplus/deficit map, Jan. 2008)</a>	<a href="#">Corps of Engineers 1987 Wetland Delineation Manual</a> <a href="#">1987 Manual Regional Supplements</a> <a href="#">Wetland Delineator Certification Program (link to Univ. of MN website)</a> <a href="#">Wetland delineation guidance documents</a> <a href="#">List of certified wetland delineators</a> <b>Wetland Functional Assessment</b> <a href="#">BWSR-approved wetland evaluation methods:</a> <a href="#">MnRAM 3.2 (Minnesota Routine Assessment Methodology for Evaluating Wetland Functions)</a> <a href="#">A Regional Guidebook for Applying the Hydrogeomorphic Approach to Assessing Wetland Functions of Prairie Potholes (May 2006)</a>	<a href="#">Native vegetation and seed mixes</a> <a href="#">Comprehensive wetland restoration strategy</a> <b>BWSR Reports</b> <a href="#">Potentially Restorable Wetlands (Nov. 2001)</a> <a href="#">Complete report (17 pages)</a> <a href="#">County maps in report: Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, Washington</a> <a href="#">Biennial MN Wetland Reports (1997-2003)</a>	<a href="#">2009 Wetland Training and Conference Calendar</a> <a href="#">2009 Wetland Training Course Listing (for BWSR and Wetland Delineator Certification Program)</a> <div> <b>Feb. 2, 2009: (FULL) Advanced WCA Training - Sequencing, Replacement Plan Reviews, Monitoring Reports</b>  <b>Where:</b> Ramsey County Public Works, 1425 Paul Kirkwood Drive, Arden Hills  <b>Time:</b> 9:30am to 3pm  <b>Cost:</b> Free  <b>Register:</b> CLOSED </div>

www.bwsr.state.mn.us/wetlands/index.html

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